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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,761	02/09/2004	Jeffrey W. Yeo	6270/136	8720

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BRINKS HOFER GILSON & LIONE/PML
PO BOX 10395
CHICAGO, IL 60610

EXAMINER	
LAU, TUNG S	
ART UNIT	PAPER NUMBER
2863	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/775,761	YEO ET AL.	
	Examiner	Art Unit	
	Tung S. Lau	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02/09/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/28/2006 has been entered.

Specification objections

2. The abstract of the disclosure is objected to because it contains less than 50 words, correction is required (See 37 CFR 1.72(b) and MPEP § 608.01(b)).

Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited See 37 CFR 1.72(b) and MPEP § 608.01(b). The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," "means" and "said," etc, should be avoided.

Claim Objections

3. Claim 23 is objected as this system claim is depend on a method claim 1, the examiner assumes it is depend on a system claim 11, correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Carr (U.S. Patent 6,968,295, Filed Dec. 31, 2002).

Regarding claim 1:

Carr discloses a method of identifying at least one unknown energy driver (Col. 17, Lines 9-34), the method comprising: receiving quantity metadata and energy usage data (Col. 16, Lines 34-56); receiving a time interval (Col. 24, Lines 17-26, lines 39-48); determining at least one relationship between the quantity metadata and energy usage data by analyzing the quantity metadata and energy usage

data (Col. 16, Lines 34-56); assessing the quality of the at least one relationship (Col. 16, Lines 34-56) to determine the quantity metadata contributing to the determined at least one relationship (Col. 31-32, Lines 54-29), identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship (Col. 16, Lines 34-56), wherein energy consumption is at least based on the at least one energy driver (Col. 16-17, Lines 34-34); and outputting the identified at least one energy driver (Col. 16-17, Lines 34-34), wherein the outputted at least one energy driver is a variable that influences the energy consumption and influences the energy usage data (Col. 31-32, Lines 54-38); and monitoring the identified at least one energy driver (Col. 24, Lines 17-31).

Regarding claim 11:

Carr discloses a system for identifying unknown energy drivers in an energy distribution network (Col. 17, Lines 9-34, fig. 1), the system comprising: an energy drivers application (Col. 4, Lines 14-64), the energy drivers application having; an input module operative to receive quantity metadata, predetermined energy driver quantities (Col. 24, Lines 17-31), energy usage data (Col. 4, Lines 14-64), and a time interval (Col. 24, Lines 17-26); a processing module coupled with the input module and operative to determine at least one relationship by analyzing the quantity metadata and energy usage data during the time interval (Col. 4, Lines 14-64, Col. 16, Lines 34-56, Col. 24, Lines 17-26), the processing module being further operable to assess the quality of the at least one

relationship to determine the quality metadata contributing to the determined at least one relationship (Col. 31-32, Lines 54-38) and identify the at least one energy driver based on the quantity metadata contributing to the determined at least one relationship (Col. 16, Lines 34-56) and based on predetermined energy driver quantities (Col. 24, Lines 17-31); wherein the at least one energy driver influence energy consumption (Col. 17, Lines 9-33) and influences the energy driver usage data (Col. 31-32, Lines 54-38); and an output module coupled with the processing module and operative to output the identified at least one energy driver (Col. 16-17, Lines 34-34).

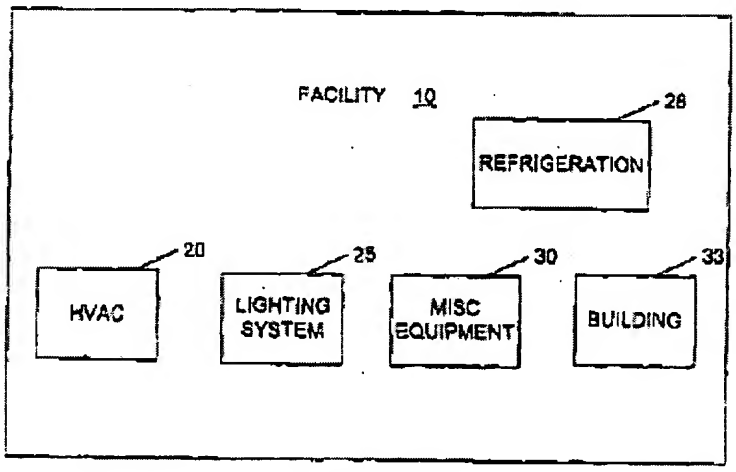

FIG. 1

Regarding claim 24:

Carr discloses a system for identifying unknown energy drivers in an energy distribution network (Col. 17, Lines 9-34), comprising: means for accepting quantity metadata and energy usage data associated with consumed energy (Col. 17, Lines 9-34, fig. 1); means for determining at least one relationship by

analyzing the quantity metadata and energy usage data (Col. 17, Lines 9-34); associated with consumed energy within a predetermined time interval (Col. 24, Lines 17-26); means for assessing the quality of the at least one relationship to determine the quantity metadata contributing to determined at least one relationship (Col. 16-17, Lines 34-34); means for identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship; and influencing the amount of the consumed energy and energy usage data (Col. 31-32, Lines 54-29); and means for outputting the identified at least one energy driver (Col. 16-17, Lines 33-34); and means for monitoring the identified at least one energy driver to manage energy usage (Col. 24, Lines 17-31).

Regarding claim 25:

Carr discloses an energy drivers application implemented on a computer (Col. 8, Lines 21-37), the computer having a processor and a memory coupled with the processor (Col. 8, Lines 21-37), the energy drivers application comprising: first logic stored in the memory and executable by the processor and operable to accept quantity metadata and energy usage data (Col. 8, Lines 21-37, Col. 16, Lines 34-56); second logic stored in the memory, executable by the processor and coupled with the first logic (Col. 17, Lines 8-31), and operable to determine at least one relationship by analyzing the quantity metadata potential energy usage data and potential energy driver (Col. 24, Lines 17-31), the second logic being further operable to assess the quality of the at least one relationship to

determine the quantity metadata contributing to the determined at least one relationship (Col. 31-32, Lines 54-38) and further identify the at least one energy driver from the quantity metadata contributing to the determined at least one relationship wherein the at least one energy driver comprises a variable influence energy usage (Col. 19, Lines 45-67, Col. 31-32, Lines 13-38), and third logic stored in the memory, executable by the processor and coupled with the second logic, and operable to output the at least one energy driver (Col. 19, Lines 45-67), and fourth logic stored in the memory, executable by the processor and coupled with the third logic, and operable to monitor the at least one energy driver for management of energy usage (Col. 24, Lines 39-48).

Regarding claim 26:

Carr discloses an energy drivers application for use in an energy distribution network (fig. 1, abstract), comprising: an input module operative to accept quantity metadata and energy usage data (Col. 1, Lines 25-67); a processing module coupled with the input module and operative to determine at least one relationship by analyzing the quantity metadata and energy usage data (Col. 8, Lines 21-37) within a chosen time period (Col. 24, Lines 17-26), the processing module being further operable to assess the quality of the at least the relationship through statistic analysis (Col. 17, Lines 16-21) and identify the at least one energy driver from the quantity metadata contributing to the determined at least one relationship wherein the at least one energy driver comprises an external factor affecting energy consumption and the energy usage data (Col. 16-

17, Lines 34-34, Col. 31-32, Lines 54-38); and an output module coupled with the processing module and operative to output the identified at least one energy driver (Col. 17, Lines 7-34).

Regarding claims 2, Carr discloses comparing the quantity metadata contributing the determined at least one relationship with a predetermined list of potential energy driver (fig. 43, HVA energy zone in each month Compressor and Fans MWh); Regarding claims 15, Carr discloses to manage energy driver usage by monitoring at least one energy driver (fig. 43); Regarding claims 3, 16, Carr discloses relates to production levels (abstract); Regarding claims 4, 17, Carr discloses production schedules (Col. 5, Lines 32-39); Regarding claims 5,18, Carr discloses related to process variable (Col. 17, Lines 7-34); Regarding claims 8, 21, Carr discloses generic algorithm (Col. 17-18, Lines 35-60); Regarding claims 9, 22. Carr discloses the energy usage are not ratiometrically linked (Col. 20-21, Lines 65-8); Regarding claims 10, 23, Carr discloses outputting graph (fig. 41); Regarding claim 12, Carr discloses network (Col. 8, Lines 21-38); Regarding claim 13, Carr discloses IED in a network (abstract, Col. 8, Lines 21-38); Regarding claim 14, (Col. 8, Lines 21-38) discloses measuring device coupled to network (abstract, Col. 8, Lines 21-38); Regarding claims 6 and 19, use of linear regression analysis (Col. 27, Lines 26-46). Regarding claims 7 and 20, use of multivariate regression analysis (Col. 23, Lines 1-50, at least two or more dependent variables using one independent variable).

Response to Arguments

5. Applicant's arguments filed on 12/28/2006 with respect to the amended claims have been fully considered but they are not persuasive.

A. Applicant argues that the prior art does not show "analysis within a time period to determined a relationship between energy usage and quantity metadata" (applicants remarks page 8, lines 14-15).

Carr discloses "analysis within a time period to determined a relationship between energy usage and quantity metadata" in Col. 24, Lines 17-26, Lines 39-48, fig. 43, where the power is measure and determined in a hour or hours basis and time initial and time terminated manner.

B. Applicant continues to argue that the prior art does not show "recording of measurements with a plurality of sensors at predetermined interval for predetermined time" (applicants remarks page 8, lines 16-17).

Carr discloses "recording of measurements with a plurality of sensors at predetermined interval for predetermined time" in Col. 24, Lines 17-26, Lines 39-48, fig. 43, where the power is measure and determined in a hour or hours basis and time initial and time terminated manner.

C. Applicant continues to argue that the prior art does not show "monitoring the identified at least one energy driver" (applicants remarks page 8, line 22).

Carr discloses "monitoring the identified at least one energy driver" in Col. 16, Lines 34-56.

D. Applicant continues to argue that the prior art does not show "monitoring the identified energy driver to manage energy usage"(applicants remarks page 9, line 1-2).

Carr discloses "monitoring the identified energy driver to manage energy usage" in Col. 1, Lines 34-53, where an condition of energy usage are identify and tune the system to have the optimums operation condition in fig. 48 at least.

E. Applicant continues to argue that the prior art does not show "potential energy drivers or potential energy driver quantities used in identifying an energy driver" (applicants remarks page 9, line 3-4).

Carr discloses "potential energy drivers or potential energy driver quantities used in identifying an energy driver" in Col. 1, Lines 34-53, where an condition of energy usage are identify and tune the system to have the optimums operation condition.

F. Applicant continues to argue that the prior art does not show "assess the quality of the at least one relationship.., and identify at least one energy driver from the quantity metadata contributing to the determined at least one relationship" (applicants remarks page 9, line 9-11).

Carr discloses "assess the quality of the at least one relationship.., and identify at least one energy driver from the quantity metadata contributing to the determined at least one relationship" in Col. 24, Lines 17-37.

G. Applicant continues to argue that the prior art does not show "identifying at least one unknown energy driver" (applicants remarks page 9, line 21).

Carr discloses "identifying at least one unknown energy driver" in Col. 24, Lines 17-37, this case the driver is express in term of Qdef, other "driver" are identify as in Col. 23, Lines 1-20, etc.

H. Applicant continues to argue that the prior art does not show "an energy driver is identified" (applicants remarks page 10, line 5).

Carr discloses show "an energy driver is identified" " in Col. 24, Lines 17-37, this case the driver is express in term of Qdef, other "driver" are identify as in Col. 23, Lines 1-20, etc as in affects by the energy usage level (driver) of the device.

Seems the applicants argue the use of the word "driver' for a narrow meaning (applicants remarks page 10, lines 5-20).

Applicant mention "driver" broadly in the specification page 10 section 0035 as "energy driver is some variable that affects energy usage", Carr discloses exactly that in his invention.

Reminds the applicants that during patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

While the meaning of claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode

of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allowed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Words in patent claims are given their ordinary meaning in the usage of the field of the invention, unless the text of the patent makes clear that a word was used with a special meaning; Renishaw PLC v. Marposs Societa ' per Azioni, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998), where there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meanings. See also MPEP § 2111.01.
Without a specific meaning from the applicant disclosure, USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). In view of the art of invention in this case, 'driver" can interpret as any unknown data that cause the change in any pattern, certainly Carr discloses such usage.

I. Applicant continues to argue that the prior art does not show "identification of an energy driver that influence the energy usage data" (applicants remarks page 10-11, line 21-4).

Carr discloses "identification of an energy driver that influence the energy usage data" in Col. 24, Lines 17-31.

J. Applicant continues to argue that the prior art does not show "identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship, wherein energy consumption is at least based on the at least one energy driver" (applicants remarks page 11, line 10-13). Carr discloses show "identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship, wherein energy consumption is at least based on the at least one energy driver" in Col. 24, Lines 17-45.

K. Applicant continues to argue that the prior art does not show "identification of at least one energy driver, the identification of energy drivers by a relationship between quantity metadata and energy usage data, the identification of an energy driver" (applicants remarks page 11, line 20-24).

Carr discloses "identification of at least one energy driver in Col. 24, Lines 17-26, the identification of energy drivers by a relationship between quantity metadata and energy usage data, the identification of an energy driver" in Col. 24, Lines 17-48.

Contact information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to

reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tung S. Lau
AU 2863, Patent examiner
January 24, 2007